



A.D. 1856 N° 2500.



S P E C I F I C A T I O N

OF

WILLIAM WOODFORD.

CHIMNEYS.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

1857.



A.D. 1856 N° 2500.

Chimneys.

LETTERS PATENT to William Woodford, of Taunton, in the County of Somerset, Gentleman, for an Invention for "**THE PREVENTION OR CURE OF SMOKY CHIMNEYS.**"

Sealed the 24th December 1856, and dated the 24th October 1856.

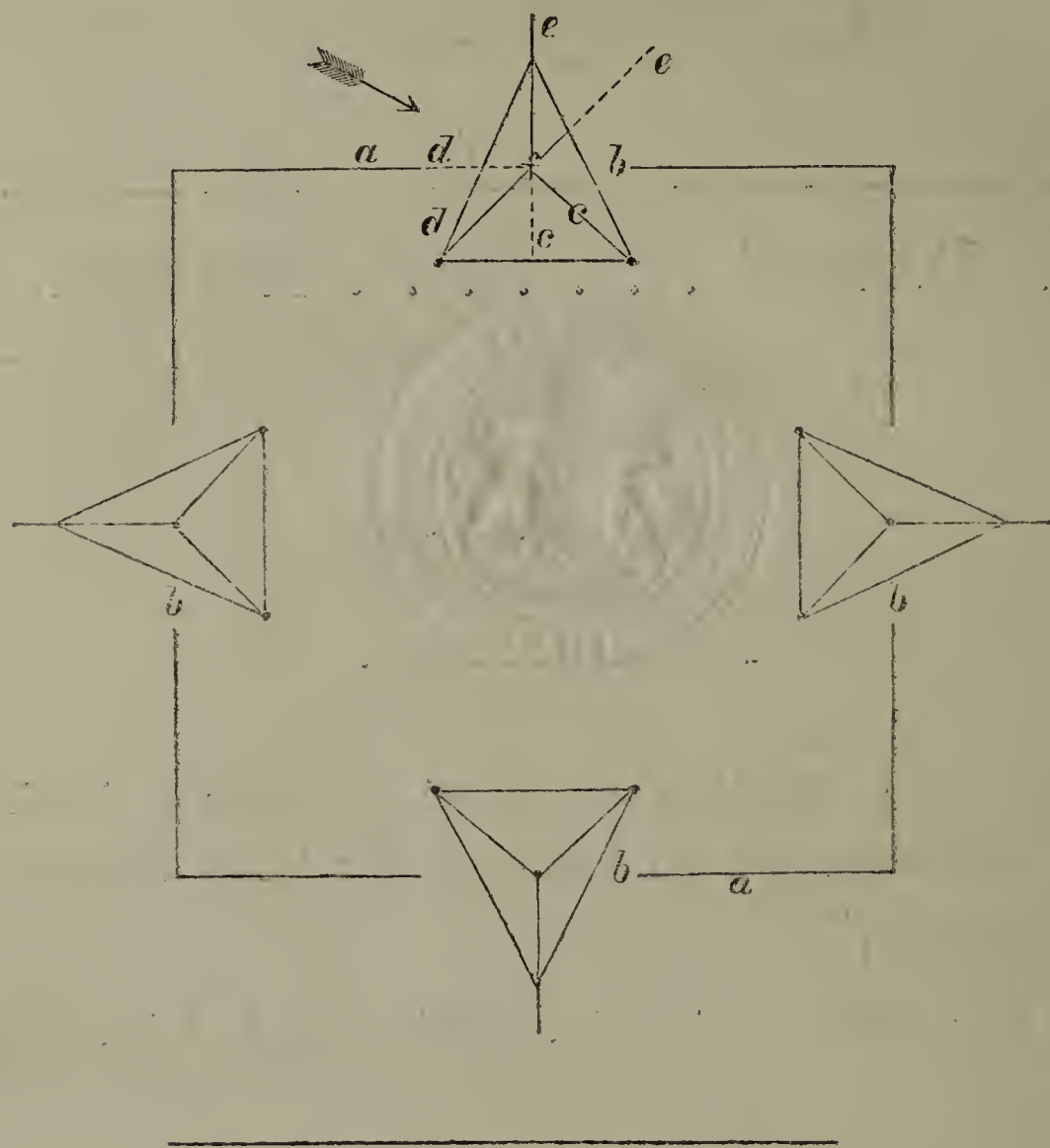
PROVISIONAL SPECIFICATION left by the said William Woodford at the Office of the Commissioners of Patents, with his Petition, on the 24th October 1856.

I, WILLIAM WOODFORD, of Taunton, in the County of Somerset, Gentleman,
5 do hereby declare the nature of the said Invention for "**THE PREVENTION OR CURE OF SMOKY CHIMNYS,**" to be as follows:—

My Invention consists in forming apertures in the different sides of a chimney near the top, or in a cowl fixed upon the top, and placing in each aperture a three-leaved vane turning upon a vertical spindle, one leaf projecting outwards from the face of the chimney, and the other two being
10 situated within the chimney or cowl, as shown in the accompanying Sketch, which represents a plan in section of the apparatus. *a, a*, is the chimney; *b, b*, the apertures; *c, d, e*, the three-leaved vane, turning upon a vertical spindle or centre *f*. The Drawing represents all the apertures open, but
15 should the wind impinge upon the leaf *e* the vane would turn upon its centre,

Woodford's Method for Prevention or Cure of Smoky Chimneys.

into the position shewn by the dotted lines, the leaf *d* would close one half of the aperture, leaving the other half open, and which would be protected from the wind by the leaf *e*.



SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said William Woodford in the Great Seal Patent Office on the 5 26th March 1857.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, WILLIAM WOODFORD, of Taunton, in the County of Somerset, Gentleman, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-fourth day of October, in the year of our 10 Lord One thousand eight hundred and fifty-six, in the twentieth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said William Woodford, Her special licence that I, the said William Woodford, my executors, administrators, and assigns, or such others as I, the said William Woodford, my executors, administrators, and assigns, should at any 15 time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland,

Woodford's Method for Prevention or Cure of Smoky Chimneys.

the Channel Islands, and Isle of Man, an Invention for "THE PREVENTION OR CURE OF SMOKY CHIMNEYS," upon the condition (amongst others) that I, the said William Woodford, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly
5 describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said William Woodford, do hereby declare
10 the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:—

My Invention for the prevention or cure of smoky chimneys consists in forming apertures in the sides of a chimney near the top, or in the sides of
15 a cowl placed on the top of a chimney (the top of the chimney or cowl being closed), and in placing in each of the said apertures a three-leaved vane turning upon a vertical spindle or axis, one leaf of each vane projecting outwards from the face of the chimney or cowl, and the other two leaves being situated within the chimney or cowl, as shewn in the accompanying Drawings,
20 in which Figure 1 represents an elevation of a cowl constructed according to my Invention, and Figure 2 a plan in section. a, a , is the body of the cowl; b, b , the lateral apertures therein; and c, c^1, c^{11} , the three-leaved vanes, placed one in each aperture and turning upon the vertical spindle d . The internal leaves c^1, c^{11} , should preferably form a right angle or nearly so (when
25 the cowl is straight-sided) with each other, and the external leaf should stand at an equal angle with each of the leaves c^1, c^{11} , and the area of the external leaf should exceed that of an internal leaf; and to produce smoothness of action one of the internal leaves of each vane may be connected with one of the internal leaves of the opposite vane by a rod passing diagonally from
30 the one leaf to the other, as shewn at e, e , so as to cause the movement of the weathermost vanes to produce a similar movement of the opposite vanes.

The operation of the Invention will be readily understood by reference to Figure 2, which represents all the apertures as open; but supposing the wind to come from the quarter indicated by the arrows it would, by its action
35 upon the external leaves c, c , cause the vanes to turn upon their centres and assume the position shewn by the dotted lines, the leaves c^1, c^1 , closing one half of the apertures, leaving open the other half, which would be protected from the wind by the position of the external leaves c, c .

Woodford's Method for Prevention or Cure of Smoking Chimneys.

The cowls or chimney tops may be made of any suitable shape, as cylindrical, square, hexagonal, &c.

Having thus described my Invention, and the manner of carrying the same into effect, I would observe that I do not limit myself to the precise details herein described, as they may be modified without departing from the principle 5 of my Invention; but I claim as my Invention for the prevention or cure of smoky chimneys, the application of three-leaved vanes, each vane turning upon a vertical spindle, to lateral apertures formed near the top of a chimney, or in a cowl placed on the top of a chimney (the top of such chimney or cowl being covered), so that by the action of the wind upon the external leaf of a vane 10 one of the internal leaves of the said vane shall be made to close one half of the aperture, whilst the other half remains open, but protected from the wind by the external leaf of the vane, as herein above described.


In witness whereof, I, the said William Woodford, have hereunto set my hand and seal, this Nineteenth day of March, in the year of our Lord 15 One thousand eight hundred and fifty-seven.

WILLIAM WOODFORD. (L.S.)

Witness,

FREDK. CLARKE,

Bookseller, &c., Taunton.



20

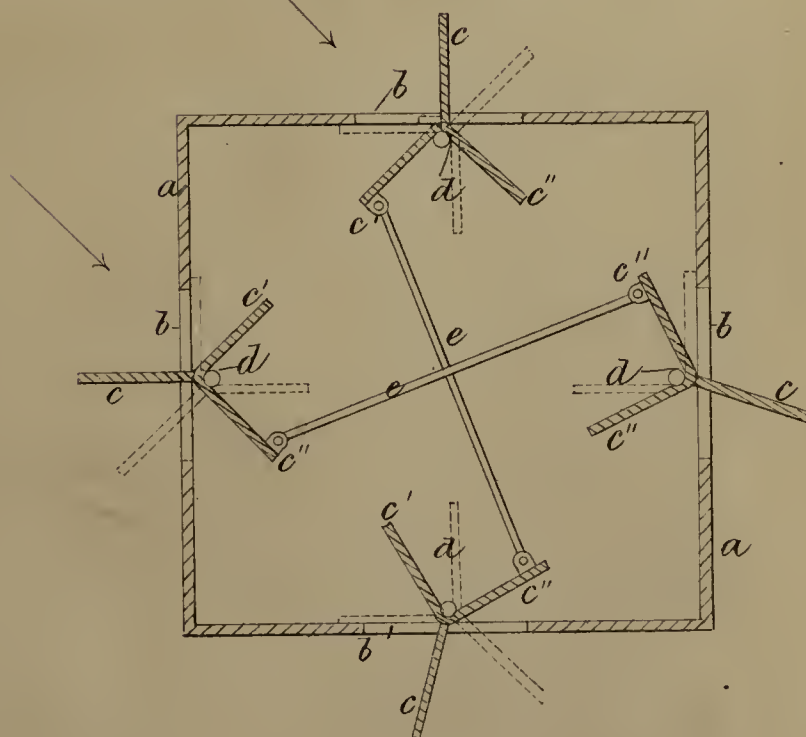
LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1857.

FIG. 1.



FIG. 2.



The filed drawing is not colored.

Drawn on Stone by Malby & Sons

